DETAILED ACTION

1. This office action is in response to the Amendment filed on 12/21/2009. Claim 20 has been cancelled. Claims 1-19 are now pending.

2. The objections and rejections not addressed below are deemed withdrawn.

3. The text of those sections of Title 35, U.S. Code not included in this section can be found in a prior Office Action.

Claim Rejections - 35 USC § 103

4. Claims 1-6 and 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itoi et al. (US6159437) in view of Kumta et al. (US7247288).

The rejections stand as per the reasons set forth in paragraph 4 of the previous Office Action, incorporated herein by reference.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Itoi et al. (US6159437) in view of Kumta et al. (US7247288).

The rejections stand as per the reasons set forth in paragraph 5 of the previous Office Action, incorporated herein by reference.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Itoi et al. (US6159437) in view of Kumta et al. (US7247288).

The rejections stand as per the reasons set forth in paragraph 6 of the previous Office Action, incorporated herein by reference.

Allowable Subject Matter

7. Claims 14-19 are allowed.

Response to Arguments

8. Applicant's arguments filed 12/21/2009 have been fully considered but they are not persuasive.

9. Applicants argued: "Itoi after agitation milling includes a substantial quantity of apatite particles having dimensions greater than 500 nm".

Response: The language of claim 1 is for the dimension of the platelet not for the primary particles. The crystal particles of Itoi have short axis of 10 to 100 nm and a long-axis length of 30 to 300 nm (column 3, lines 21-35) that is prima facie obvious of the claimed particle dimensions.

10. Applicants argued: "Kumta does not teach or suggest use of a polymer that complexes calcium in a colloidal dispersion" and "Kumta does not describe a colloidal dispersion of calcium phosphate particle at all".

Response: Attention is drawn to Kumta column 9, lines 30-32, "a solution containing nanocrystalline hydroxyapatite particles which are complexed with a transforming nucleic acid". Kumta further disclose colloidal precipitation method for the synthesis of hydroxyapatite (column 1, lines 60-67). However, Kumta is use for the suggestion of using complexing polymer with the nanocrystalline hydroxyapatite and in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413,

208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

11. Applicants argued: "Neither Itoi nor Kumta describe or suggest a polymer complexed to the calcium of the calcium phosphate ...".

Response: Kumta is use for the suggestion of using complexing polymer with the nanocrystalline hydroxyapatite. The polymers of Kumta have the same functional group as claimed which will complex with calcium of the calcium phosphate. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun-Cheng Wang whose telephone number is (571)270-5459. The examiner can normally be reached on Monday to Friday w/alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571)272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ling-Siu Choi/
Primary Examiner, Art Unit 1796

/Chun-Cheng Wang/
Examiner, Art Unit 1796

/CCW/